4.2.B. 0603000302.

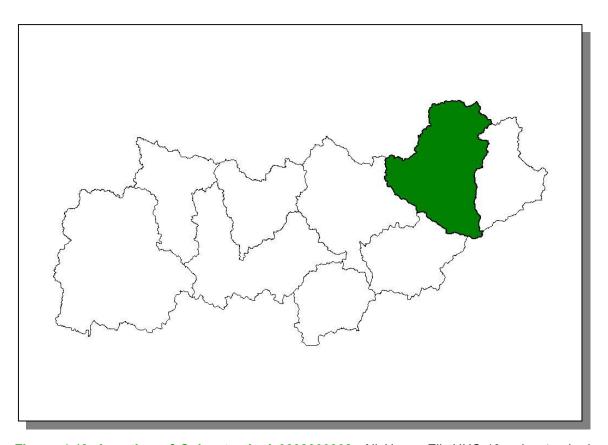


Figure 4-13. Location of Subwatershed 0603000302. All Upper Elk HUC-10 subwatershed boundaries are shown for reference.

4.2.B.i. General Description.

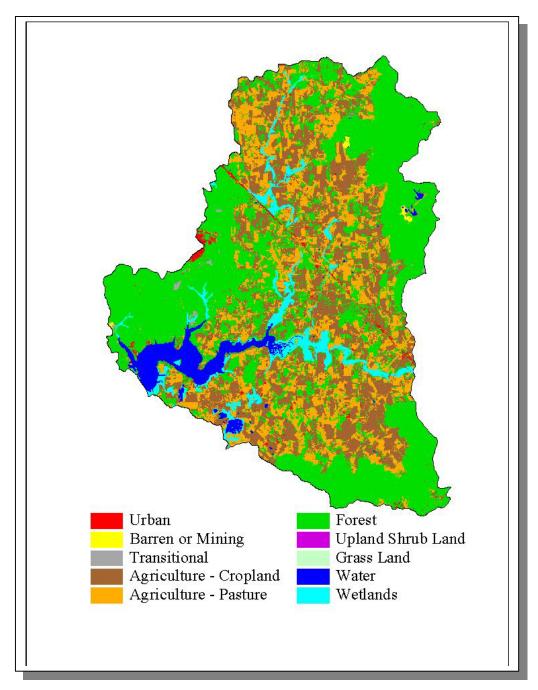


Figure 4-14. Illustration of Land Use Distribution in Subwatershed 0603000302.

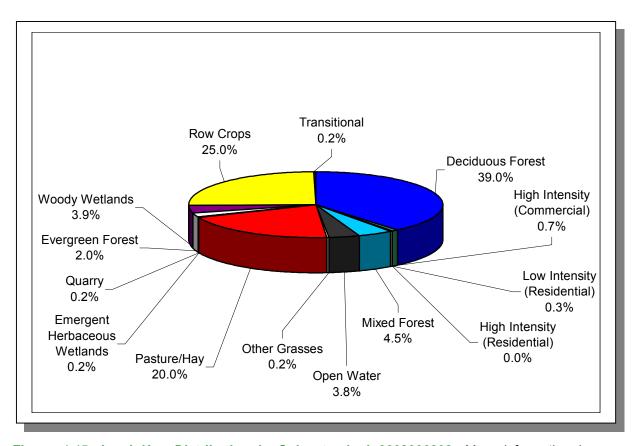


Figure 4-15. Land Use Distribution in Subwatershed 0603000302. More information is provided in Upper Elk-Appendix IV.

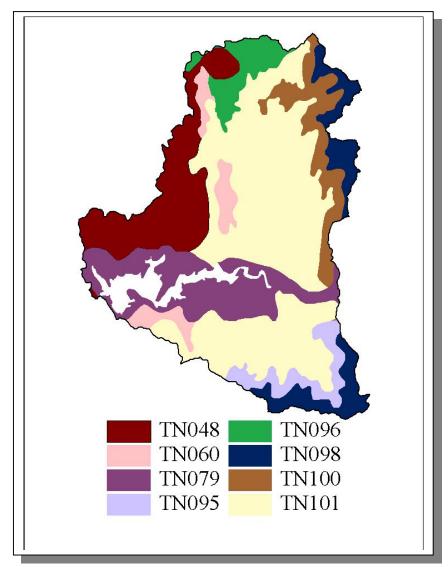


Figure 4-16. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0603000302.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN048	8.00	С	1.38	5.06	Silty Loam	0.42
TN060	5.00	В	1.30	5.32	Silty Loam	0.39
TN079	8.00	С	1.30	5.66	Silty Loam	0.35
TN095	0.00	В	2.35	5.12	Loam	0.31
TN096	1.00	С	1.22	5.16	Silty Loam	0.38
TN098	1.00	С	3.98	4.82	Loam	0.32
TN100	0.00	В	1.14	3.35	Silty Loam	0.21
TN101	0.00	В	1.71	5.39	Loam	0.35

Table 4-8. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0603000302. More information is provided in Upper Elk-Appendix IV.

	COUNTY POPULATION			ESTIMATED POPULATION IN WATERSHED		% CHANGE
			Portion of			
County	1990	1997 Est.	Watershed (%)	1990	1997	
Coffee	40,339	45,347	20.46	8,253	9,277	12.4
Franklin	34,725	37,152	13.03	4,526	4,842	7.0
Grundy	13,362	14,102	1.8	240	252	5.0
Total	88,426	96,601		13,019	14,371	1.10

Table 4-9. Population Estimates in Subwatershed 0603000302.

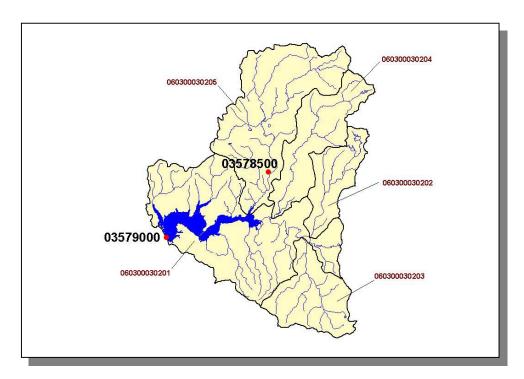


Figure 4-17. Location of Historical Streamflow Data Collection Sites in Subwatershed 0603000302. Subwatershed 060300030201, 060300030202, 060300030203, 060300030204, and 060300030205 boundaries are shown for reference. More information is provided in Upper Elk-Appendix IV.

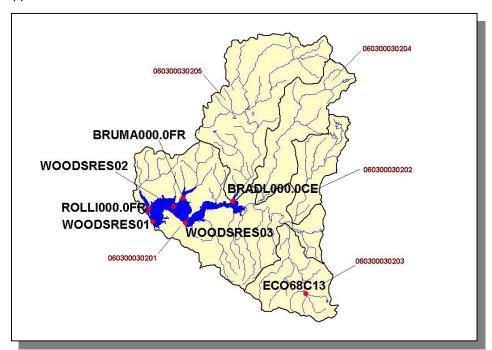


Figure 4-18. Location of STORET Monitoring Sites in Subwatershed 0603000302. Subwatershed 060300030201, 060300030202, 060300030203, 060300030204, and 060300030205 boundaries are shown for reference. More information is provided in Upper Elk-Appendix IV.

4.2.B.ii. Point Source Contributions.

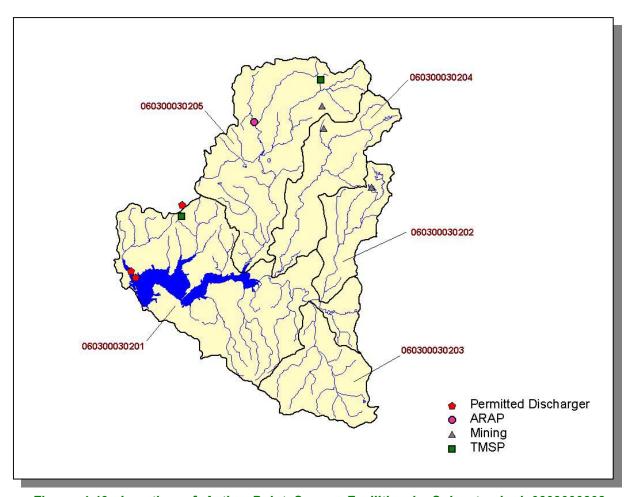


Figure 4-19. Location of Active Point Source Facilities in Subwatershed 0603000302. Subwatershed 060300030201, 060300030202, 060300030203, 060300030204, and 060300030205 boundaries are shown for reference. More information is provided in the following charts.

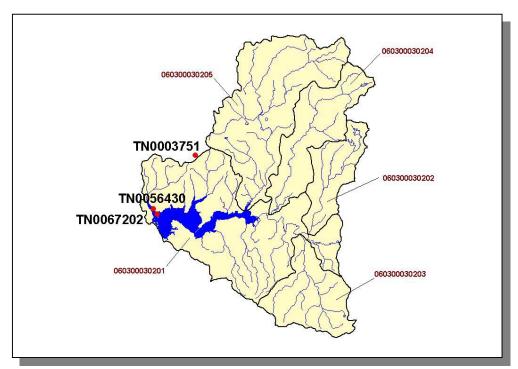


Figure 4-20. Location of Active Point Source Facilities (Individual Permits) in Subwatershed 0603000302. Subwatershed 060300030201, 060300030202, 060300030203, 060300030204, and 060300030205 boundaries are shown for reference. More information, including the names of facilities, is provided in Upper Elk-Appendix IV.

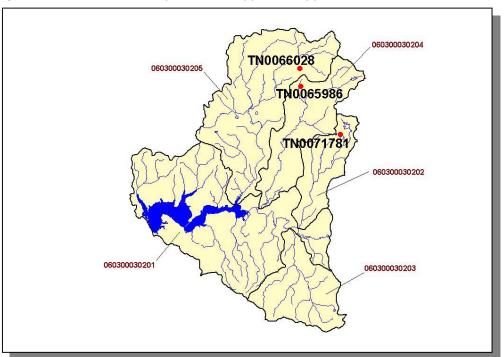


Figure 4-21. Location of Active Mining Sites in Subwatershed 0603000302. Subwatershed 060300030201, 060300030202, 060300030203, 060300030204, and 060300030205 boundaries are shown for reference. More information, including the names of facilities, is provided in Upper Elk-Appendix IV.

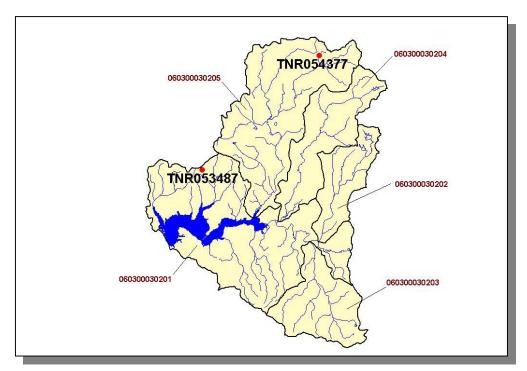


Figure 4-22. Location of TMSP Facilities in Subwatershed 0603000302. Subwatershed 060300030201, 060300030202, 060300030203, 060300030204, and 060300030205 boundaries are shown for reference. More information, including the names of facilities, is provided in Upper Elk-Appendix IV.

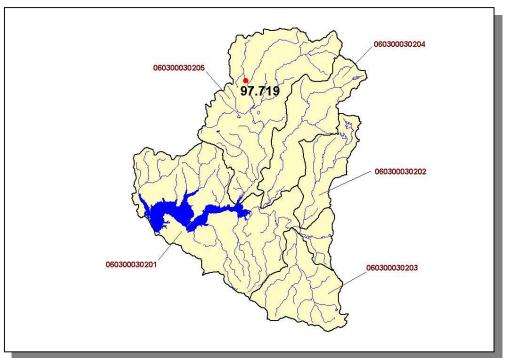


Figure 4-23. Location of ARAP Sites (Individual Permits) in Subwatershed 0603000302. Subwatershed 060300030201, 060300030202, 060300030203, 060300030204, and 060300030205 boundaries are shown for reference. More information, including the names of facilities, is provided in Upper Elk-Appendix IV.

4.2.A.ii.a. Dischargers to Water Bodies Listed on the 1998 303(d) List

There are three NPDES facilities discharging to water bodies listed on the 1998 303(d) list in Subwatershed 0603000302:

- TN0003751 (AEDC) discharges to Bradley, Brumalow, Rowland, and Spring Creeks and to Woods Reservoir
- TN0056430 (UT Space Institute) discharges to Rollins Creek @ RM 1.1
- TN0067202 (UT Space Institute) discharges to Rollins Creek Embayment of Woods Reservoir

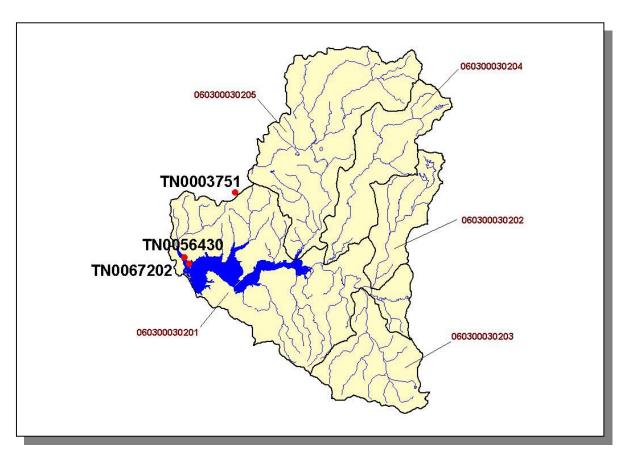


Figure 4-24. Location of NPDES Dischargers to Water Bodies Listed on the 1998 303(d) List in Subwatershed 0603000302. Subwatershed 060300030201, 060300030202, 060300030203, 060300030204, and 060300030205 boundaries are shown for reference. The names of facilities are provided in Upper Elk-Appendix IV.

PERMIT#	1Q10	3Q10	7Q10	3Q20	QDESIGN
TN0003751				0.00	Varies by Outfall
TN0056430				0.00	0.00630
TN0067202					0.02

Table 4-10. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0603000302. Data are in million gallons per day (MGD). Data were obtained from the USGS publication Flow Duration and Low Flows of Tennessee Streams Through 1992 or from permit files.

PERMIT#	DO	TDS	TSS	рН	OIL and GREASE	SETTLEABLE SOLIDS	FECAL COLIFORM	NH ₃	CBOD₅	TEMP	TRC	TSS
TN0003751	Х		Х	X	Х	X	Х	X	Х	Х	Х	Х
TN0056430		Х		Х	X							Χ
TN0067202	X		Х	Χ				Х	Χ		Χ	

Table 4-11. Parameters Monitored for Daily Maximum (mg/L) Limits for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0603000302. TDS, Total Dissolved Solids; TSS, Total Suspended Solids; TCR, Total Residual Chlorine.

PERMIT #	Ag	Cu	Cd	Cr (Total)	Pb
TN0003751	Χ	Χ	Χ	Χ	X

Table 4-12a. Inorganic Parameters Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0603000302.

PERMIT #	FLOW	71-55-6	75-35-4	79-01-6	127-18-4	75-09-2
TN0003751	X	X	X	X	X	X

Table 4-12b. Parameters Monitored by NPDES Dischargers to Waterbodies Listed on the 1998 303(d) List in Subwatershed 0603000302. CAS (Chemical Abstract System) Codes: 71-55-6, Trichloroethane; 75-35-4, 1,1-Dichloroethene; 79-01-6, Trichloroethene; 127-18-4, Tetrachloroethene; 75-09-2, Methylene Chloride.

4.2.B.iii. Nonpoint Source Contributions.

			LIVEST	OCK (COUNT	S)		
	Beef Cow	Cattle	Milk Cow	Chickens	Chickens Sold	Hogs	Sheep
ſ	5.608	13.816	1,281	12	2,607,744	3.475	85

Table 4-13. Summary of Livestock Count Estimates in Subwatershed 0603000302. According to the 1997 Census of Agriculture (http://www.nass.usda.gov/census/), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

	INVENT	ORY	REMOVAL RATE		
	Forest Land (thousand	Timber Land	Growing Stock	Sawtimber	
County	acres)	(thousand acres)	(million cubic feet)	(million board feet)	
Coffee	114.4	114.2	2.8	12.7	
Franklin	183.4	183.0	6.0	28.7	
Grundy	174.5	165.9	5.6	17.7	
Total	472.3	463.1	14.4	59.1	

Table 4-14. Forest Acreage and Average Annual Removal Rates (1987-1994) in Subwatershed 0603000302.

CROPS	TONS/ACRE/YEAR
Legume/Grass (Hayland)	0.16
Grass (Hayland)	0.72
Forest Land (Grazed)	0.00
Forest Land (Not Grazed)	0.00
Corn (Row Crops)	8.29
Soybeans (Row Crops)	10.34
Cotton (Row Crops)	4.03
Wheat (Close Grown Cropland)	10.08
Grass (Pastureland)	0.94
Grass, Forbs, Legumes (Mixed Pasture)	0.38
Other Vegetable and Truck Crop	4.37
Other (Horticulture)	2.14
Other Cropland not Planted	4.56
Conservation Reserve Program Land	0.11
Non Agricultural Land Use	0.00
Farmsteads and Ranch Headquarters	0.16

Table 4-15. Annual Estimated Total Soil Loss in Subwatershed 0603000302.